

PREVIOUSLY PRESENTED CLAIMS

1. (Previously Presented) A muffler insert for use in a muffler comprising:  
a body of wool-type fibrous material conforming to the shape of a compartment  
in a tool; and  
a yarn wound around the body, thereby confining the volume of the body.
2. (Previously Presented) The muffler insert of claim 1, wherein the muffler  
insert includes a perforated pipe.
3. (Previously Presented) The muffler insert of claim 2, wherein the insert  
further includes at least one partition(s) coupled to the pipe.
4. (Previously Presented) The muffler insert of claim 3, wherein at least one of  
the partition(s) comprises a perforated partition.
5. (Previously Presented) The muffler insert of claim 1, wherein the yarn  
comprises a polymer yarn having a tensile strength at room temperature of at least 550  
megapascals and having a tensile strength at temperatures greater than about 80  
degrees Celsius of at most 50 megapascals.
6. (Previously Presented) The muffler insert of claim 5, wherein the polymer  
yarn is selected from the group consisting of polypropylene yarn and modified  
polyethylene yarn.
7. (Previously Presented) The muffler insert of claim 5, wherein the polymer  
yarn has a fiber diameter of between approximately 0.2 and 1.0 millimeters.

8. (Previously Presented) The muffler insert of claim 1, wherein the yarn comprises a steel yarn thread.

9. (Previously Presented) The muffler insert of claim 1, wherein the wool-type product comprises one or more strands of a continuous strand material.

10. (Previously Presented) The muffler insert of claim 9, wherein the continuous strand material comprises one or more strands each comprising a plurality of glass filaments selected from the group consisting of E-glass filaments and S-glass filaments.

11. (Previously Presented) The muffler insert of claim 1 wherein the muffler insert includes a core material, and wherein the body of wool-type fibrous material surrounds at least a portion of the core material.

Claims 12 - 15 (Cancelled)

16. (Previously Presented) A method for forming a muffler insert comprising:  
providing a tool having one or more compartments;  
introducing a fibrous material within at least one of the compartments to form a wool-type fibrous body;  
placing the tool onto a winding machine;  
wrapping a yarn around at least a portion of the body to form the muffler insert;  
removing the tool from the winding machine; and  
extracting the muffler insert from the tool.

17. (Previously Presented) The method of claim 16, wherein introducing a fibrous material comprises:

introducing a nozzle of a texturizing device within a fill opening of the tool;  
and

introducing one or more strands of a continuous strand material from the texturizing device through the nozzle and into the compartment under vacuum pressure.

18. (Previously Presented) The method of claim 16, wherein wrapping a yarn comprises:

coupling the yarn contained on the winding machine to a gripper;  
rotating a portion of the winding machine around the tool such that the yarn is wound onto the body of fibrous material to form the muffler insert; and  
cutting the yarn between the muffler insert and the winding machine.

19. (Previously Presented) The method of claim 18 further comprising affixing the yarn to the muffler insert.

20. (Previously Presented) The method of claim 19, wherein affixing the yarn to the muffler insert comprises affixing the end of the yarn to another portion of the yarn.

21. (Previously Presented) The method of claim 20, wherein affixing the end comprises ultrasonically welding the end to another portion of the yarn.

22. (Previously Presented) The method of claim 20, wherein affixing the end comprises hot welding the end to another portion of the yarn.

23. (Previously Presented) The method of claim 20, wherein affixing the yarn to the muffler insert comprises knotting the end of the yarn to another portion of the yarn.

24. (Previously Presented) The method of claim 19, wherein affixing the yarn to the muffler insert comprises affixing the end within the body of fibrous material.

25. (Previously Presented) A method for forming a muffler comprising:  
providing an unfilled muffler insert;  
coupling a tool around a portion of the insert, the tool having an upper section and a lower section, the tool and the insert defining at least one compartment there between;  
filling the at least one compartment with a fibrous material such that the material forms a wool-type body within the compartment of the tool;  
placing the tool onto a winding machine;  
moving the upper section of the tool away from the lower section to create a gap;  
wrapping and securing a yarn around a portion of the body of fibrous material exposed within the gap to form a filled and wound muffler insert;  
removing the tool and the muffler insert from the winding tool;  
extracting the muffler insert from the tool; and  
coupling the muffler insert within a muffler shell.

26. (Previously Presented) The method of claim 25, wherein forming the wool-type body comprises:

introducing a nozzle of a texturizing device within a fill opening of the tool;  
introducing one or more strands of a continuous strand material from said the texturizing device through the nozzle and into the compartment under vacuum pressure.

27. (Previously Presented) The method of claim 25, wherein wrapping and securing a yarn comprises:

coupling the yarn contained on the winding machine to the body within the gap;  
rotating a portion of the winding machine around the body such that the yarn is wound onto the body; and  
cutting the yarn between the body and the winding machine; and  
securing the yarn around the body.

28. (Previously Presented) The method of claim 27, wherein securing the yarn to the body comprises affixing the end of the yarn to another portion of the yarn.

29. (Previously Presented) The method of claim 28, wherein affixing the end comprises ultrasonically welding the end to another portion of the yarn.

30. (Previously Presented) The method of claim 28, wherein affixing the end comprises hot welding the end to another portion of the yarn.

31. (Previously Presented) The method of claim 27, wherein securing the yarn around the filled insert comprises knotting the end to another portion of the yarn.

32. (Previously Presented) The method of claim 25, wherein coupling the muffler insert within a muffler shell comprises:

providing a muffler shell having a pair of open ends and an interior region;

providing a pair of end pieces;

pressing the muffler insert through the open end and within the interior region;

coupling one of the pair of end pieces to one of the pair of open ends;

coupling the other of the pair of end pieces to the other of the pair of open ends;

sealingly affixing the one of the pair of end pieces to the one of the pair of open ends; and

sealingly affixing the other of the pair of end pieces to the other of the pair of open ends.

33. (Previously Presented) The method of claim 25, wherein coupling the muffler insert within a muffler shell comprises:

providing a muffler shell having an interior region and a first end and second end; and

coupling the muffler shell around the muffler insert such that the muffler insert is substantially contained within the interior region and such that the first end substantially abuts the second end; and

sealingly affixing the first end to the second end.

34. (Cancelled)

35. (Previously Presented) The method of claim 16 wherein at least one of the one or more compartments includes a perforated pipe.

36. (Previously Presented) The method of claim 25 wherein the muffler insert includes a perforated pipe.